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ABSTRACT

The study was conducted to gain insight into the nature and structure of educators' education-related attitudes and beliefs. Subjects included both education students and teachers. The subjects completed two instruments (Kerlinger's Educational Scale VII and the Educational Philosophy Index). Results suggest that more than two dimensions are required to subsume educators' beliefs, although some researchers have argued that two dimensions should be sufficient. Thus, it appears that educators' beliefs are more complex than some educators generally assume. (Author/DS)

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Dimensions of Educational Worldview

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The study was conducted to gain insight into the nature and structure of educators' education-related attitudes and beliefs. Subjects included both education students and teachers. The subjects completed two instruments. Results suggest that more than two dimensions are required to subsume educators' beliefs, although some researchers have argued that two dimensions should be sufficient. Thus, it appears that educators' beliefs are more complex than some educators generally assume.

Bruce Joyce and Marsha Weil (1972) have argued that "educational procedures are generated from general views about human nature and about the kinds of goals and environments that enhance human beings." Unfortunately, it would be difficult to test this notion. Kerlinger's (1967) statement that "few attempts have been made to determine empirically the nature and structure" of educational worldviews holds true even today. The main exception to this generalization is provided by Kerlinger's own work.

For two decades Kerlinger (1958) and Kerlinger and Kaya (1959) have argued that two basic dimensions, relatively uncorrelated to each other, underlie beliefs about education. It has been argued that these two dimensions are similar to two of the fundamental views of education that philosopher John Dewey outlined at the turn of the century, i.e.—"Progressivism" and "Traditionalism."

The study reported here was undertaken to provide further insight into the structure of educators' perceptions of environment; once such insight is achieved, it should be possible to determine how these dimensions impinge on the decisioning processes of teachers. Specifically, the study

primarily addressed the question, do Kerlinger's two dimensions subsume all the dimensions of educators' worldviews?

Method

The subjects (n=195) in the study were education students or teachers. Both subject groups were included in the study in order to maximize systematic variance in responses and thus hopefully increase the liklihood of result replicability. Each subject completed Kerlinger's (1967) Education Scale VII and the Educational Philosophy Index (Thompson and Miller, 1977). The Educational Philosophy Index was developed to measure the extent to which persons agree or disagree with what Kneller (1974) has termed educational theories, i.e.—formal philosophies mediated by experience.

Data from each instrument were subjected to separate factor analyses. Two factors, judged to measure "Progressivism" and "Traditionalism," were extracted from the interitem correlation matrix computed from Education Scale VII response data. Five second-order factors, judged to measure "Essentialism," "Humanism," "Perennialism," "Progressivism," and "Existentialism," were extracted from the correlation matrix associated with the Educational Philosophy Index.

Least square regression estimates of factor scores were calculated for both data sets.

These factor scores were then employed in a canonical correlation analysis conducted to examine relationships between the factors from the two instruments. Two statistically significant ($p<.05$) pairs of canonical variates were identified. The canonical correlation between the two sets of factors on the first pair of variates was .45. The canonical correlation between the two sets of factors on the second pair of variates was .31.

Canonical structure and index coefficients (Thompson and Frankiewicz, in press) were computed in order to achieve some understanding of the dynamics of these relationships. A structure coefficient when squared indicates the percentage of variance which a variable linearly shared with an aggregate of the variables of its *own* set. An index coefficient when squared indicates the percentage of variance which a variable linearly shared with an aggregate of all the variables of the *other* set. Canonical variate, structure, and index coefficients for the variates are presented in Table 1.

Table 1

Canonical Coefficients

Factor	V	S	I	V	S	I
Progressivism	-.62	-.62	-.28	.78	.78	.24
Traditionalism	.78	.78	-.35	.62	.62	.19
Essentialism	.87	.17	.08	-.22	-.25	-.08
Humanism	-.92	-.62	-.28	.56	.24	.08
Perennialism	.42	.33	.15	.77	.72	.22
Progressivism	.14	.19	.08	-.23	-.14	-.04
Existentialism	.32	.38	.17	.46	.49	.15

Note: "V"=variate coefficient; "S"=structure coefficient; "I"=index coefficient

Conclusions

Examination of the canonical variate, structure, and index coefficients suggests several conclusions. With regard to the first of the two pairs of canonical variates, the variate spanning the philosophy factors was primarily defined by the factor, "Humanism," which was inversely related to the variate, as indicated by the factor's structure coefficient. The variate spanning the Education Scale factors was defined by both the factors, "Progressivism" and "Traditionalism." "Traditionalism" was directly related to the variate; "Progressivism" was inversely related to the variate. These results suggest that educators who agree with the tenets of "Humanism" tend also to be progressive and non-traditional in outlook.

With regard to the second pair of variates, the variate spanning the philosophy factors was primarily defined by the factor, "Perennialism," as indicated by the factor's structure coefficient. The factor was directly related to the variate. The variate spanning the Education Scale factors was defined by both the factors, "Progressivism" and "Traditionalism." The two factors were both directly related to the variate.

Overall, the results appear to support the construct

validity of the Educational Philosophy Index, i.e.—only theoretically relevant philosophy factors were associated with the "educational attitudes" factors of the Education Scale VII. It is, of course, surprising that the philosophy factor, "Progressivism," was not substantially associated with the "educational attitude" factor, "Progressivism." However, this finding was made more understandable when the items measuring the constructs were examined. The Education Scale VII contains no items which measure extent of agreement with a core concept of progressive outlook, i.e.—that change is the essence of contemporary reality. Perhaps the authors of Education Scale VII did not intend to fully measure all aspects of the worldview articulated by Dewey.

Of more theoretical interest, however, is the conclusion that not all the educational philosophies were associated with the "educational attitudes" factors. Interpretation of the canonical index coefficients indicates that, on each of the two identified pairs of canonical variates, only one philosophy factor shared more than 5% of its variance with each aggregate of the two Education Scales factors. This enhances the possibility that not

all worldviews are subsumed under two categories. The findings also suggest that the worldviews of educators may be more structurally complex than some educators and researchers generally assume.

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